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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/714,627

11/17/2000

Masakazu Hattori

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01/14/2005

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EXAMINER

LE, MIRANDA

ART UNIT

PAPER NUMBER

2167

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,627

Applicant(s)

HATTORI ET AL.

Examiner

Miranda Le

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,10,11,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,10,11,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment filed 07/19/2004.
2. Claims 1-7, 10-11, 15-16 are pending in this application. Claims 1, 15, 16 are independent claims. In the Amendment, claims 1-3, 6, 10 have been amended, claims 8-9, 12-14 have been cancelled, claims 15-16 have been added. This action is made Final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 4-7, 10-11, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Tateishi et al. (US Patent No. 5,669,007).

Tateishi anticipated independent claims 1, 15, 16, by the following:

As to claims 1, 15, 16, Tateishi teaches "A structured document search method for searching a structured document database, comprising: accepting a search request in the form of a logical structured document" at col. 6, lines 27-59, col. 17, line 64 to col. 18, line 50, Fig. 4,

“analyzing the accepted search request to generate a search graph including graph nodes based on the logical structure, wherein a variable to be embodied is inserted between the graph nodes” at col. 6, lines 27-59, col. 17, line 64 to col. 18, line 50, col. 12, line 43 to col. 13, line 5, Fig. 4;

“generating a search plan for a hierarchical structure possessed by a searched document, in which a search processing procedure for said structured document database is developed from said search graph” at col. 6, line 60 to col. 7, line 41, col. 17, line 64 to col. 18, line 50, Fig. 4, said generating the search plan including:

“(a) applying a plan generation rule to any one of said graph nodes, using a plan generation rule base including a plurality of plan generation rules, the plurality of plan generation rules each including rule application conditions, costs and search processing procedures” at col. 6, line 60 to col. 7, line 41, col. 14, lines 16-61, Fig. 4,

“(b) executing a search processing procedure of the applied plan generation rule for materializing said variable” at col. 6, line 60 to col. 7, line 41, col. 17, line 64 to col. 18, line 50; and

“(c) repeating the applying and the executing thereby to complete said search plan, and acquiring search results satisfying said search request by executing said search plan” at col. 17, line 64 to col. 18, line 49, Fig. 4.

As per claim 2, Tateishi teaches “utilizing index information relating to actual data in said structured document database for said materializing” at col. 10, lines 13-33.

As per claim 4, Tateishi teaches “the search plan is executed after the completion of the generation of said search plan” at col. 17, line 64 to col. 18, line 50.

As per claim 5, Tateishi teaches “generation and execution of said search plan are performed alternately” at col. 17, line 64 to col. 18, line 50.

As per claim 6, Tateishi teaches “said structured document database includes a hierarchical structure concerning element name and element value” at col. 15, lines 9-53, col. 17, line 64 to col. 18, line 50, Fig. 10;

“said search request includes search conditions concerning said element name and said element value” at col. 15, lines 9-53, Fig. 10;

“said index information includes at least one of data creation index including information for specifying said element value creation position in said structured document database and element name occurrence index including information for specifying said element name creation position in said structured document database” at col. 10, lines 13-33.

As per claim 7, Tateishi teaches “said element name occurrence index includes information indicating said element name creation position by a parent element one rank higher in hierarchy of the partial structure where said element name is generated” at col. 10, lines 13-33.

As per claim 10, Tateishi teaches “said plan generation rule can be arbitrarily registered or deleted in said plan generation rule base” at col. 10, lines 13-33, col. 14, lines 16-61.

As per claim 11, Tateishi teaches “wherein said search graph is generated based on the syntax analysis results of the description of said search request, in the generation of said search graph” at col. 13, line 6 to col. 14, line 11, col. 11, line 26 to col. 12, line 42.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tateishi et al. (US Patent No. 5,669,007), in view of Bello et al. (US Patent No. 6,496,819 B1).

As per claim 3, Tateishi does not explicitly teach “selecting, from applicable plan generation rules, a plan generation rule a cost of which is less than said applicable plan generation rules”. However, Bello teaches this limitation at col. 11, lines 1-27.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references because Bello’s teachings would have allowed Tateishi’s to efficiently rewrite queries to access data sources that are not specifically referenced in the queries and thereby can access the current best materialized view.

Response to Arguments

7. Applicant's arguments regarding Cheng does not suggest the amended claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

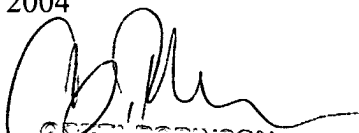
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (571) 272-4107. The fax number to this Art Unit is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
January 07, 2004



CYNTHIA ROBINSON
PATENT EXAMINER